

In response to the Office Action, please amend the claims as shown in the attached listing.

**\*\* Remainder of Page is Blank\*\***

## LISTING OF CLAIMS

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1. (Previously Presented) A method for authenticating an electronic payment comprising:  
receiving from a seller an electronic sales draft including an electronic signature;  
receiving from said seller a digital certificate associated with a buyer, said digital  
certificate including a verification key and an encrypted version of a personal  
identification number (PIN);  
using said verification key to verify that said electronic signature was authorized by said  
buyer;  
extracting said encrypted version of said PIN from said digital certificate;  
decrypting said encrypted version of said PIN;  
generating, using said PIN, an authorization request;  
sending said authorization request to a financial institution;  
receiving an approval of said authorization request from said financial institution; and  
sending said approval to said seller.
2. (Currently Amended) A method for authorizing an electronic purchase in a networked  
computer environment, comprising the steps of:  
(a) receiving, from a merchant, a transaction authorization request including a digital  
certificate passed through said merchant from a user involved in said transaction,  
(i) said digital certificate including a financial account datum associated with  
said user as well as a public key of said user,  
(ii) said digital certificate also including conveying a binding between at least  
a portion of said financial account datum and said a public key of said  
user;  
(b) verifying said binding using a cryptographic verification key associated with a  
trusted party performing said binding; and  
(c) using said financial account datum to authorize a transaction order digitally  
signed by said user with a private key corresponding to said public key.

3. (Previously Presented) The method of claim 2 where said digital certificate constitutes said binding.
4. (Previously Presented) The method of claim 2 where said binding is embedded in said digital certificate.
5. (Previously Presented) The method of claim 2 where said financial account datum includes a credit card number.
6. (Previously Presented) The method of claim 2 where said financial account datum includes a debit card number.
7. (Previously Presented) The method of claim 2 where said financial account datum includes a PIN.
8. (Previously Presented) The method of claim 2 where said financial account datum includes a card verification value 2.
9. (Previously Presented) The method of claim 2 where said financial account datum includes checking account information.
10. (Previously Presented) The method of claim 2 where said binding is performed with a symmetric key shared between said trusted party and a party performing said verification step.
11. (Previously Presented) The method of claim 2 where said binding is performed with an asymmetric key corresponding to said cryptographic verification key.
12. (Previously Presented) The method of claim 2 where said binding is performed by an issuer of said digital certificate.

13. (Currently Amended) The method of claim 2 where said binding is ~~performed~~ performed by an issuer of said financial accounting datum.
14. (Previously Presented) The method of claim 2 where said digital certificate is protected with an access code known to said user.
15. (Currently Amended) A method for providing electronic payment capabilities to a user in a networked computer environment, comprising the steps of:
- (a) obtaining a financial account datum associated with said user;
  - (b) obtaining a public key associated with said user;
  - (c) obtaining a cryptographically assured binding of said public key to at least a portion of said financial account datum,
    - (i) said financial account datum, said public key, and said binding being included conveyed in a digital certificate for said user,
    - (ii) said digital certificate being usable by said user to conduct an electronic transaction involving said financial account datum; and
  - (d) transmitting said digital certificate to said user, enabling said user to conduct said electronic transaction involving (i) a merchant, and (ii) a transaction processor capable of verifying said binding using a cryptographic verification key associated with a trusted party performing said binding.
16. (Previously Presented) The method of claim 15 where said digital certificate constitutes said binding.
17. (Previously Presented) The method of claim 15 where said binding is embedded in said digital certificate.
18. (Previously Presented) The method of claim 15 where said financial account datum includes a credit card number.

19. (Previously Presented) The method of claim 15 where said financial account datum includes a debit card number.
20. (Previously Presented) The method of claim 15 where said financial account datum includes a PIN.
21. (Previously Presented) The method of claim 15 where said financial account datum includes a card verification value 2.
22. (Previously Presented) The method of claim 15 where said financial account datum includes checking account information.
23. (Previously Presented) The method of claim 15 where said binding is performed with a symmetric key shared between said trusted party and said transaction processor.
24. (Previously Presented) The method of claim 15 where said binding is performed with an asymmetric key corresponding to said cryptographic verification key.
25. (Previously Presented) The method of claim 15 where said binding is performed by an issuer of said digital certificate.
26. (Previously Presented) The method of claim 15 where said binding is performed by an issuer of said financial account information.
27. (Previously Presented) The method of claim 15 further comprising the step, after step (a), of verifying said financial account datum.
28. (Previously Presented) The method of claim 15 where said digital certificate is protected with an access code known to said user.

29. (Previously Presented) The method of claim 15 where said digital certificate is stored at a credential server accessible to said user.
30. (Currently Amended) An apparatus for authorizing an electronic purchase in a networked computer environment, comprising:
- (a) a computer processor;
  - (b) a memory connected to said processor storing a program to control the operation of said processor;
  - (c) the processor operable with said program in said memory to:
    - (i) receive, from a merchant, a transaction authorization request, said request including a digital certificate passed through said merchant from a user involved in said transaction,
      - (1) said digital certificate including a financial account datum associated with said user as well as a public key of said user,
      - (2) said digital certificate also including conveying a binding between at least a portion of said financial account datum and a public key of said user;
    - (ii) verify said binding using a cryptographic verification key associated with a trusted party performing said binding; and
    - (iii) use said financial account datum to authorize a transaction order digitally signed by said user with a private key corresponding to said public key.

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31. (Previously Presented) The apparatus of claim 30 where said financial account datum includes a PIN.
32. (Previously Presented) The apparatus of claim 30 where said financial account datum includes a card verification value 2.
33. (Previously Presented) The apparatus of claim 30 where said binding is performed with an asymmetric key corresponding to said cryptographic verification key.

34. (Currently Amended) An apparatus for providing electronic payment capabilities to a user in a networked computer environment, comprising:
- (a) a processor;
  - (b) a memory connected to said processor storing a program to control the operation of said processor;
  - (c) the processor operable with said program in said memory to:
    - (i) obtain a financial account datum regarding said user,
    - (ii) obtain a public key associated with said user,
    - (iii) obtain a cryptographically assured binding of said public key to at least a portion of said financial account datum,
      - (1) said financial account datum, said public key, and said binding being included ~~eonveyed~~ in a digital certificate for said user,
      - (2) said digital certificate being usable by said user to conduct an electronic transaction involving said financial account datum, and
    - (iv) transmit said digital certificate to said user, enabling said user to conduct said electronic transaction involving (1) a merchant, and (2) a transaction processor capable of verifying said binding using a cryptographic verification key associated with a trusted party performing said binding.

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35. (Previously Presented) The apparatus of claim 34 where said financial account datum includes a PIN.
36. (Previously Presented) The apparatus of claim 34 where said financial account datum includes a card verification value 2.
37. (Previously Presented) The apparatus of claim 34 where said binding is performed with an asymmetric key corresponding to said cryptographic verification key.
38. (Currently Amended) A computer-readable storage medium encoded with processing instructions for implementing a method for authorizing an electronic purchase in a

networked computer environment, said processing instructions for directing a computer to perform the steps of:

- (a) receiving, from a merchant, a transaction authorization request, said request including a digital certificate passed through said merchant from a user involved in said transaction,
  - (i) said digital certificate including a financial account datum associated with said user as well as a public key of said user,
  - (ii) said digital certificate also including conveying a binding between at least a portion of said financial account datum and a public key of said user;
- (b) verifying said binding using a cryptographic verification key associated with a trusted party performing said binding; and
- (c) using said financial account datum to authorize a transaction order digitally signed by said user with a private key corresponding to said public key.

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- 39. (Previously Presented) The computer-readable medium of claim 38 where said financial account datum includes a PIN.
  - 40. (Previously Presented) The computer-readable medium of claim 38 where said financial account datum includes a card verification value 2.
  - 41. (Previously Presented) The computer-readable medium of claim 38 where said binding is performed with an asymmetric key corresponding to said cryptographic verification key.
  - 42. (Currently Amended) A computer-readable storage medium encoded with processing instructions for implementing a method for providing electronic payment capabilities to a user in a networked computer environment, said processing instructions for directing a computer to perform the steps of:
    - (a) obtaining a financial account datum regarding said user;
    - (b) obtaining a public key associated with said user;
    - (c) obtaining a cryptographically assured binding of said public key to at least a portion of said financial account datum,

- (i) said financial account datum, said public key, and said binding being included eonveyed in a digital certificate for said user,
- (ii) said digital certificate being usable by said user to conduct an electronic transaction involving said financial account datum; and
- (d) transmitting said digital certificate to said user, enabling said user to conduct said electronic transaction involving (i) a merchant, and (ii) a transaction processor capable of verifying said binding using a cryptographic verification key associated with a trusted party performing the said binding.
43. (Previously Presented) The computer-readable medium of claim 42 where said financial account datum includes a PIN.
44. (Previously Presented) The computer-readable medium of claim 42 where said financial account datum includes a card verification value 2.
- C 45. (Previously Presented) The computer-readable medium of claim 42 where said binding is performed with an asymmetric key corresponding to said cryptographic verification key.
46. (Currently Amended) A digital certificate for use in an electronic payment transaction in a networked computer environment, comprising:
- (a) a financial account datum associated with a user as well as a public key associated with said user;
- (b) a cryptographically assured binding of said a public key associated with said user to at least a portion of said financial account datum, said binding having been generated with a cryptographic verification key associated with a trusted party performing said binding;
- (c) said digital certificate configured for use by a transaction processor to:
- (i) verify said binding using a cryptographic verification key associated with said trusted party, and

(ii) access said financial account datum to authorize a transaction order digitally signed with said user's private key corresponding to said public key.

47. (Previously Presented) The digital certificate of claim 46 where said digital certificate constitutes said binding.

48. (Previously Presented) The digital certificate of claim 46 where said binding is embedded in said digital certificate.

49. (Previously Presented) The digital certificate of claim 46 where said financial account datum includes a credit card number.

50. (Previously Presented) The digital certificate of claim 46 where said financial account datum includes a debit card number.

51. (Previously Presented) The digital certificate of claim 46 where said financial account datum includes a PIN.

52. (Previously Presented) The digital certificate of claim 46 where said financial account datum includes a card verification value 2.

53. (Previously Presented) The digital certificate of claim 46 where said financial account datum includes checking account information.

54. (Previously Presented) The digital certificate of claim 46 where said binding is performed with a symmetric key shared between said trusted party and said transaction processor.

55. (Previously Presented) The digital certificate of claim 46 where said binding is performed with an asymmetric key corresponding to said cryptographic verification key.

56. (Previously Presented) The digital certificate of claim 46 where said binding is performed by an issuer of said digital certificate.
57. (Previously Presented) The digital certificate of claim 46 where said binding is performed by an issuer of said financial account datum.
58. (Previously Presented) The digital certificate of claim 46 where said digital certificate is protected with an access code known to said user.
59. (Previously Presented) The method of claim 2 where at least a portion of said financial account datum is kept confidential from said merchant.
60. (Previously Presented) The method of claim 15 where at least a portion of said financial account datum is kept confidential from said merchant.
61. (Previously Presented) The method of claim 30 where at least a portion of said financial account datum is kept confidential from said merchant.
62. (Previously Presented) The method of claim 34 where at least a portion of said financial account datum is kept confidential from said merchant.
63. (Previously Presented) The method of claim 38 where at least a portion of said financial account datum is kept confidential from said merchant.
64. (Previously Presented) The method of claim 42 where at least a portion of said financial account datum is kept confidential from said merchant.
65. (Previously Presented) The method of claim 46 where at least a portion of said financial account datum is kept confidential from said merchant.